

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SONRAI MEMORY LIMITED,

Plaintiff,

v.

KIOXIA CORPORATION and KIOXIA
AMERICA, INC.

Defendants.

Case No. 6:21-cv-00400-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

DELL TECHNOLOGIES,
INC.

Defendant.

Case No. 6:21-cv-00361-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

APPLE INC.,
Defendant.

Case No. 6:21-cv-00401-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Case No. 6:21-cv-00167-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

LG ELECTRONICS INC., LG
ELECTRONICS U.S.A., INC.,

Defendants.

Case No. 6:21-cv-00168-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA,
INC.,

Defendants.

Case No. 6:21-cv-00169-ADA

SONRAI MEMORY LIMITED,

Plaintiff,

v.

WESTERN DIGITAL TECHNOLOGIES,
INC.,

Defendant.

Case No. 6:21-cv-01168-ADA

**PLAINTIFF SONRAI MEMORY LIMITED'S
RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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I. DISPUTED TERMS FOR THE '241 PATENT

A. “A charge pump circuit for generating a charge pump voltage having minimal voltage ripples” (preamble of claim 1)

As Sonrai explained in its Responsive Brief, the “for generating . . .” language recites only an intended purpose of the invention, and is not limiting. *See* Resp. Br. at 2-3 (citing *TomTom, Inc. v. Adolph*, 790 F.3d 1315, 1323 (Fed. Cir. 2014) (the fact that a portion of a preamble “provides a necessary structure for [the claim] does not necessarily convert the entire preamble into a limitation, particularly one that only states the intended use of the invention”)). Defendants’ arguments to the contrary are unavailing.

For example, Defendants newly allege that the claimed “charge pump . . . would have little meaning without its intended objective,” citing the Notice of Allowance and the specification’s teachings that “[a]n object of the invention is to provide a charge pump circuit with a minimum-ripple pump output Voltage.” Reply Br. at 1. But Defendants’ conclusion does not follow. First, it is black letter law that an examiner’s unilateral statements in a Notice of Allowance do not themselves limit the scope of a claim. *3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1373 (Fed. Cir. 2003) (“[P]rosecution history . . . cannot be used to limit the scope of a claim unless the *applicant* took a position before the PTO.”) (emphasis in original) (quoting *Schwing GmbH v. Putzmeister Aktiengesellschaft*, 305 F.3d 1318, 1324–25 (Fed. Cir. 2002)). Second, the '241 Patent’s specification says nothing of whether the inventive charge pump circuit *must* minimize voltage ripples, and instead makes clear that this is merely an *intended purpose* of the invention of the sort that courts consistently find to be non-limiting when recited in a preamble. *See* '241 Patent at 3:1-2. Defendants admitted as much when they conceded that the disputed portion of the preamble “explain[s] the intended objective” of the claimed invention. Op. Br. at 4.

Defendants next argue that when the claims recite a “load,” what was actually meant was not any “load,” but rather only “loads for ripple minimization.” *See* Reply Br. at 2. But this argument goes to the proper construction of the term “load,” which is a separate term for construction. And at any rate, as shown in Sonrai’s Responsive Brief and in Section I.B below, “load” should not be redefined in the manner Defendants propose.

Defendants also argue for the first time in Reply that “‘charge pump voltage having minimal voltage ripples’ provides antecedent basis for the ‘pump voltage’ recited” in claim limitation 1(b). Reply Br. at 2. However, to the extent that claim limitation 1(b)’s recitation of “a specific pump voltage” invokes antecedent basis at all, that antecedent basis would be provided by claim 1(a)’s recitation of “a selected one of a plurality of pump voltages.”

Finally, Defendants argue that the because the structural recitation of “charge pump circuit” in the preamble provided antecedent basis for the body of the claims, the separate “for generating . . .” language must also be limiting. Reply Br. at 2-3. But this argument is directly contrary to *TomTom*, which made clear that when one portion of a preamble provides antecedent basis and a separate portion of the preamble recites an intended purpose, only the former portion is limiting. *TomTom*, 790 F.3d at 1323. Defendants provide only two distinctions over *TomTom*, each of which fails. First, Defendants argue that the “for generating” language “does not simply recite . . . an intended use or purpose,” (Reply Br. at 2-3), but as explained above, this language merely recites an intended purpose or objective of the invention. *See also* Op. Br. at 4 (conceding that this language “explain[s] the intended objective” of the claim). Second, Defendants argue that the claim language here “cannot be easily packaged into two separate portions.” Reply Br. at 2-3. But as shown in Sonrai’s Response Brief, the claim language can be readily packaged into separate portions: “[1] A charge pump circuit [2] for generating a charge pump voltage having minimal

voltage ripples.” Resp. Br. at 4.¹ Tellingly, Defendants provide no explanation in their Reply Brief as to why the claim language cannot be neatly packaged into these two separate portions, and thus provide no persuasive reason why the reasoning of *TomTom* should not apply here.

B. “load” (claim 1)

Defendants’ Reply confirms their intention to construe “load” in order to limit the claim to aspects of the preferred embodiment. There is no lexicography—no intent to define what “load” means—in any of Defendants’ cited excerpts, just descriptions the preferred embodiments that happen to contain the word “load.” Defendants’ unwarranted insertion of seventeen words into the claim should be rejected.

C. “a load selector means for selectively coupling a load associated with a specific pump voltage to the output of said pumping circuit” (claim 1)

As explained in Sonrai’s responsive brief and Dr. Brogioli’s declaration, “load selector means” connotes a specific class of structures, *i.e.*, switches for connecting or disconnecting loads. Defendants give no rebuttal to Sonrai’s arguments and authorities that § 112 ¶ 6 does not apply.

Defendants are wrong that *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1538 (Fed. Cir. 1991) and *Nomos Corp. v. Brainlab USA, Inc.*, 357 F.3d 1364, 1368 (Fed. Cir. 2004) forbid reference to dependent claims when evaluating whether or not § 112 ¶ 6 applies. *Nomos*, discussing and clarifying *Laitram*, confirmed that “claim differentiation, which is a ‘guide, not a rigid rule,’ does not override the requirements of § 112, ¶ 6 when the ‘claim will bear only one interpretation.’” *Nomos*, 375 F.3d at 1368 (internal citations omitted). Here, it is far from clear that

¹ The newly cited case of *Mobile Telecommunications* is readily distinguishable because the preamble there allowed for no logical rewriting that could have both (1) included the agreed limiting language and (2) excluded the disputed language. See *Mobile Telecommunications Techs., LLC v. Google Inc.*, No. 2:16-CV-2-JRG-RSP, 2016 WL 7338398, at *64-65 (E.D. Tex. Dec. 19, 2016) (cited by Reply Br. at 2). Additionally, Defendants do not dispute Sonrai’s distinction of *SIMO Holdings*. See Resp. Br. at 4 (distinguishing *SIMO Holdings*); Reply Br. 2 (relying on *SIMO Holdings* but not addressing Sonrai’s distinctions).

“load selector means” falls under the statutory means-plus-function framework, and claim differentiation serves a useful role as a “guide” confirming that the non-§ 112 ¶ 6 construction is correct. Furthermore, Defendants do not dispute that their proposed § 112 ¶ 6 construction would render both claims 2 and 7 nonsensical, because these claims require that “the load selector means” includes elements that Defendants do not contend to be corresponding structure for “load selector means.” *See generally* Resp. Br. at 9-10 (explaining this inconsistency). Notably, Defendants have not alleged that claims 2 or 7 are indefinite on this basis, and thus have no way to reconcile the scope of these claims with Defendants’ proposed construction of “load selector means.” *See generally* Reply Br. at 4-5 (failing to explain this inconsistency); Exs. 1-7 (not alleging invalidity of claims 2 or 7 as indefinite).

Nonetheless, assuming *arguendo* that § 112 ¶ 6 does apply, the Court should reject Defendants’ attempts to rewrite the functional language and (relegated to a footnote) to import an extraneous “controller” into the corresponding structure.

Defendants fail to distinguish, or even acknowledge, the Federal Circuit’s clear instruction, quoted in Plaintiff’s responsive brief, that when construing the functional statement of a means-plus-function limitation, a court “must take great care not to impermissibly limit the function by adopting a function different from that explicitly recited in the claim.” *Generation II Orthotics Inc. v. Medical Technology Inc.*, 263 F.3d 1356, 1364–65, (Fed. Cir. 2001). Instead, Defendants ask the Court to limit the claim language just as the Federal Circuit forbids, by substantially rewriting what they argue is the function clause with no justification beyond “implication” in the specification. The claim language has a plain and ordinary meaning, and Defendants give no evidence, explanation, or argument supporting their assertion that it lacks a plain and ordinary meaning. For example, none of the words is unusual or difficult to understand; indeed, most of the

words refer back to words or phrases appearing in previous claim elements. The only citation for Defendants’ “implication” theory is to a description how “the controller,” not the load selector means, chooses a particular load. Reply at 5 (citing ’241 Patent at 4:52-62). There is no link between the “choosing” description at 4:52-62 and the actual claim language; they refer to different functions. The Court should reject Defendants’ unwarranted insertion of a new “choosing” function; if § 112 ¶ 6 applies, the claimed function is “selectively coupling a load associated with a specific pump voltage to the output of said pumping circuit.”

And without Defendants’ improper construction of the function, there is no justification to include a “controller” within the corresponding structure.

D. “target output pump selector” (claim 2)

Contrary to Defendants’ representation, Sonrai does not “concede[] that this term is a means-plus-function term with the recited function and corresponding structure identified by Defendants.” *See* Reply at 5. Rather, Sonrai made clear it does not agree with Defendants, but agreed to Defendants’ construction simply to limit the number of disputes. Resp. Br. at 12.

E. “the target output selector means” (claim 3)

The term in dispute is not “target output selector means,” standing in isolation. Rather, as Defendants correctly state in their opening brief, the complete term is “*the* target output selector means.” Op. Br. at 11 (emphasis in original). As Defendants acknowledged in that brief, the term’s “use in claim 3 assumes the term has already been used,” but neither Defendants nor their expert performed any analysis to determine whether the term appropriately references a previously-recited claim limitation. Op. Br. at 11; Subramanian Decl. ¶ 41.

Defendants cannot meet their burden of establishing, by clear and convincing evidence, that a POSA would not be reasonably certain of the meaning of this term. First, Dr. Brogioli testified that a POSA *would* understand the term to refer to the “load selector means” recited in

claim 1. Brogioli Decl. ¶ 25. Defendants do not provide rebuttal expert testimony or even mention Dr. Brogioli's testimony on this issue. *See generally* Reply Br. at 5-6. Thus, Dr. Brogioli's testimony regarding a POSA's understanding of this term is not disputed.

Second, Defendants' primary argument rests entirely on the what the patentee "could have" done in order to more clearly indicate that "the target output selector means" refers back to the "load selector means" of claim 1. But the fact that a patentee *could have* drafted a claim with more hypothetical clarity is not a sufficient basis for a finding of indefiniteness. *See, e.g., KAIFI LLC v. Celco P'ship*, No. 2:20-CV-00280-JRG, 2021 WL 3048444, at *28 (E.D. Tex. July 20, 2021) (rejecting indefiniteness challenge, "[a]lthough the claim language is less than ideal"); *Abaxis, Inc. v. Cepheid*, No. 10-CV-02840-LHK, 2011 WL 3298613, at *12 (N.D. Cal. July 22, 2011) (rejecting indefiniteness challenge, even though "the claim might have been more clearly drafted").

Third, Defendants argue that the term is indefinite "because it lacks antecedent basis," (Resp. Br. at 6), but provide no evidence that a POSA would fail to understand the term as referring back to the "load selector means" of claim 1.

Finally, Defendants raise two additional arguments that Defendants only allege to be relevant if "load selector means" is construed as a means-plus-function term. Reply Br. at 6 (arguing inconsistency of Sonrai's proposed construction of "the target output selector means" with a means-plus-function interpretation of "load selector means"). But as for the reasons explained in Section I.C above and in Sonrai's Response Brief, these arguments are irrelevant because "load selector means" should not be construed as a means-plus-function term.

F. "the output pump" (claims 6 and 11)

This term is no longer in dispute because Defendants have agreed to Sonrai's proposed construction: "the output of the pumping circuit." Resp. Br. at 12; Reply at 7.

II. DISPUTED TERMS FOR THE '527 PATENT

A. “portable memory apparatus” (claims 1 and 15)

The only substantive dispute regarding this term is whether “portable” should retain its plain and ordinary meaning or should be narrowed to require “external” and “for carrying data from one computer system to another computer system.” Defendants redefine “external” as the opposite of “internal to the computer system, *i.e.* contained within the computer system’s housing.” But they still give no explanation why “portable” means “external,” other than the circular reasoning that a portable device “clearly” is external, because an internal device would not be portable. Reply at 7. But the patent specification itself provides clear counterexamples, referring in its second paragraph to “[p]ortable storage mediums, such as floppy disks and compact discs (CDs).” ’527 Patent at 1:15-16. Floppy disks and compact disks in the mid-2000s certainly could be contained within the computer system’s housing and yet were obviously portable. Similarly, the patent specification describes an embodiment where a claimed “portable RAM drive may be restrained *in the computer system*,” also contradicting the “external” theory. ’572 Patent at 5:35-47 (emphasis added). There is no evidentiary or logical support that “portable” means “external,” and Defendants’ insertion should be rejected.

Defendants’ other arguments lack merit. Claim construction is not a mandatory exercise in redundancy; there must be a reason to change or insert the words selected by the patentee, and there must be a particular justification to insert a disfavored intended use into the preamble of a claim. Defendants’ proposed construction should be rejected, and “portable memory apparatus” should retain its plain and ordinary meaning.

B. “wherein, when said connector couples said portable memory apparatus to said computer system, said memory controller chip copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector” (claim 1)

As explained in Sonrai’s Response Brief, system claims are indefinite under two circumstances: (1) when they “claim activities performed by the user” rather than “the system’s capability to receive and respond to user” action, and (2) when they “use ‘functional language’ that is not ‘specifically tied to structure,’ but instead ‘appear[s] in isolation.’” *Acceleration Bay LLC v. Activision Blizzard, Inc.*, No. CV 16-453-RGA, 2017 WL 6508715, at *2 (D. Del. Dec. 20, 2017) (alterations in original) (quoting *Mastermine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1316 (Fed. Cir. 2017)). Defendants do not explicitly dispute this legal standard, nor do they allege that either scenario is applicable to the claim language at issue here. *See* Reply Br. at 8-9 (no allegation that user activities are claimed, or that the “functional language” is not tied to structure of the claimed system).

Instead, Defendants entirely ignore the relevant legal standard set forth by *Mastermine*, and implicitly argue for a sweeping expansion of indefiniteness law far beyond what Federal Circuit precedent even arguably supports. For instance, Defendants argue that when a system claim uses “active verbs” or includes language that arguably mirrors “process” steps illustrated in a patent, that claim “is a mixed apparatus-method claim and indefinite under *IPXL*.” Reply Br. at 8. But Defendants’ proposed rule is inconsistent not only with *Mastermine*, but also with Federal Circuit precedent dating back at least 15 years. *See Microprocessor Enhancement Corp v. Tex. Instruments, Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (“[A]pparatus claims are not necessarily indefinite for using functional language.”).

Defendants’ allegation is also directly at odds with *Acceleration Bay*, which relied heavily on the Federal Circuit’s *Mastermine* decision. The claim in that case recited, in part:

A computer network for providing a game environment for a plurality of participants, each participant having connections to at least three neighbor participants, *wherein an originating participant sends data* to the other participants by sending the data through each of its connections to its neighbor participants

Acceleration Bay, 2017 WL 6508715, at *2 (emphasis in original). The court held that even though the claim language recited functional language that was seemingly performed by a “participant,” the “functional language in these claims is tied to the structure of the network” because a “person of ordinary skill in the art would understand that infringement is triggered by the use of an infringing ‘network’ with certain functionality.” *Id.* at *12.

In the ’527 Patent, the relationship to the structure of the recited system is even more apparent than in *Acceleration Bay*. First, the “memory controller chip” that “copies data” is indisputably within the scope of the claimed system. Second, the remainder of the functional language is clearly tied to the capability of the claimed “connector” to allow a computer system to “access[] said data in said volatile memory.” Brogioli Decl. ¶¶ 27-28.

Defendants allege in a footnote that *Acceleration Bay* is distinguishable because the functional language “describe[s] the capabilities of . . . the claimed apparatus.” Reply Br. at 8 n.2. But as explained above, the disputed language of the ’527 Patent describes the capabilities of the claimed system even more clearly than the claim language of *Acceleration Bay* did. Failing to distinguish *Acceleration Bay*, Defendants shift focus to a case that predates *Mastermine* by nearly a decade. *See* Reply Br. at 9 (citing *Ariba, Inc. v. Emptoris, Inc.*, No. CIV.A. 9:07-CV-90, 2008 WL 3482521, at *7 (E.D. Tex. Aug. 7, 2008)). *Ariba* is further unpersuasive because the functional claim language in that case, unlike the claim language at issue here, was indisputably unrelated to the structure of the claimed system. *See generally Ariba*, 2008 WL 3482521, at *7 (E.D. Tex. Aug. 7, 2008) (describing plaintiff’s admissions that the recited functionality occurs entirely outside of the claimed system).

In sum, the claim language is not indefinite because it does not recite to activities performed by a user or functional language that is not specifically tied to structure (*see Mastermine*, 874 F.3d at 1316), and Respondents point to no persuasive authority to the contrary.

C. “when said connector couples said portable memory apparatus to said computer system, said memory controller chip copies data from said non-volatile memory to said volatile memory” (claim 1)

Although not entirely clear, it appears Defendants are attempting to change the meaning of “when said connector couples” to instead mean “at the time of connection or disconnection.” *See* Reply at 10. This should be rejected. First, this concept is not even reflected in Defendants’ construction. *See* Resp. Br. at 20-21. Second, expanding “when said connector couples” to encompass *dis*connection reads the limitation out of the claim. *See id.* at 20. Third, limiting “when said connector couples” to only the moment at which the portable memory apparatus is first plugged in, is inconsistent with the plain meaning of “when” as well as the intrinsic record. *See id.* at 20-21. Fourth, it also unclear how long this “connection period” would last under Defendants’ interpretation. Defendants’ confusing construction should be rejected, and the plain and ordinary meaning adopted.

D. “data” (all claims)

Defendants’ Reply clarifies that their construction of “data” is designed to exclude “configuration settings stored in the apparatus” because such data would not be “relevant for a user” and because a user would not want to “backup or transfer” such data. Reply at 11. These new limitations have nothing to do with the structure or operation of the claimed apparatuses and methods, instead inviting speculation about the motivations or desires of an unclaimed human being. Nowhere does the intrinsic record suggest that the claim scope requires an evaluation as to whether or not the claimed data is subjectively valuable to a user. Defendants’ proposal is unnecessary, confusing, and unwarranted.

And Defendants are wrong that the specification “consistently” refers to “user data” rather than just “data.” The specification uses the word “data” more than seventy times, and never once refers to “user data” or anything like that phrase. Defendants have expanded their list of “exemplary” citations from two to five, but to no greater effect. All five excerpts describe structures, such as indicator lights, intended either to prevent a “user” from prematurely disconnecting a device or to indicate a hardware failure so that the user can stop using the device. None of these examples indicate an intent to limit the scope of “data.” Defendants’ proposal should be rejected.

E. “wherein said memory controller chip transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system” (claim 6)

In Reply, Defendants present two arguments in favor of indefiniteness, each of which fails.

First, Defendants’ primary argument relies on the premise that there are “two ‘equally plausible’ meanings” of the claim language. Reply Br. at 11. But Defendants’ *only* evidence in support of one of these interpretations being allegedly “plausible” was an error in Sonrai’s infringement contentions. *See* Resp. Br. at 23-24. In short, Defendants contend that erroneous infringement contentions can render a claim indefinite, but Defendants cite no authority for such a proposition.

Second, Defendants argue that “when the claim is construed as written, it requires a physical impossibility.” Reply Br. at 11. As an initial matter, this argument is inconsistent with Defendants’ first argument, which alleges that a “plausible interpretation” of the claim language could be that “the memory controller transfers data from the non-volatile memory to the volatile memory.” *See* Op. Br. at 21. But more fundamentally, Defendants do not dispute Dr. Brogioli’s testimony that a memory “write” operation is a type of “transfer” operation, and that in this context

a POSA would understand that “transfers said non-volatile memory with data” to mean “writes said non-volatile memory with data.” *See* Brogioli Decl. ¶ 20.

III. DISPUTED TERMS FOR THE ’232 PATENT

A. **“A method for regenerating a clock signal in a synchronous semiconductor memory, such method comprises the following steps” (preamble of claim 14)**

The entire preamble—“A method for regenerating a clock signal in a synchronous semiconductor memory”—is limiting here. Defendants do not dispute that “A method for generating a clock signal” is limiting. *See* Op. Br. at 23; Reply at 11-13. Rather, the parties dispute focuses solely on the “in a synchronous² semiconductor memory” language. The “in a synchronous semiconductor memory” language is not an “intended use” as Defendants claim, but rather is likewise limiting because it provides a structural limitation to the recited “clock signal” and is necessary to understand what is meant by “said clock signal” in the body of the claims. *See* Resp. Br. at 25-26.

Defendants point to various “embodiments” in the specification in support of their argument that “in a synchronous semiconductor memory,” or at least the “memory” portion of that phrase, is not limiting. Reply at 12 (citing ’232 patent at 3:34-5:63, Figs. 5-8). As an initial matter, nothing in those figures or text indicates the claimed “clock signal” can be used in a non-memory system or an asynchronous memory device. And critically, those figures and text are not separate “embodiments” as Defendants suggest, but rather Figures 5 and 6 provide circuit-diagram-level detail for exemplary clock repeater circuits (and portions of them) that can be used in a synchronous memory device: “FIG. 5 is a schematic block diagram illustrating general feature of

² There also appears to be no dispute that claim 14 is limited to synchronous systems. *See* Reply at 12 n.3 (“effective clock distribution is critical in *all* digital *synchronous* systems”) (second emphasis added). Therefore, Sonrai understands this dispute as centered on whether or not claim 14 is limited to *memory* systems and devices.

a regenerative clock repeater circuit,” and “FIG. 6 is a schematic circuit diagram of a preferred embodiment of the edge detector used in the repeater circuit of FIG. 5.” ’232 patent at 3:16-21, Figs. 5-6. And Figure 7 shows “graphs illustrating the operation of the high and low trigger point inverter used in the edge detector in FIG. 6,” and “FIG. 8 illustrates a signal timing diagram showing operation of the circuit of elements of a regenerative clock repeater of FIGS. 5 and 6.” *Id.* at 3:22-27.

Use of the exemplary regenerative clock repeater circuits described in Figures 5-8 “in a synchronous semiconductor memory” is not a possible intended use, but it is rather the only option described in both the specification and the claim at issue. Defendants ignore the “Technical Field” section of the patent, which makes clear that “[t]he *invention* relates to a clock signal distribution within a *memory* integrated circuit” (*id.* at 1:3-8 (emphases added)), rather than “*all* digital synchronous systems” as Defendants claim (Reply at 12 n.3). *See, e.g., JDS Techs., Inc. v. Avigilon USA Cor.*, No. 15-cv-10385, 2017 WL 7053967, at *8, *22-23 (E.D. Mich. Dec. 8, 2017) (construing “hardware device” to mean “an image source hardware device” in part because the “Technical Field” section indicated “*this invention* relates to systems for accessing, recording, and displaying camera *images*”), *R&R adopted by* 2018 WL 1704599, at *7 (E.D. Mich. Apr. 9, 2018); *GPNE Corp. v. Apple, Inc.*, No. 12-cv-3057, 2013 WL 4446819, at *6-8 (N.D. Cal. Aug. 13, 2013) (construing “node” to “pager with two-way communications capability” part because the “Technical Field” section indicated “*this invention* pertains to communications paging, and particularly to two-way paging”). Other portions of the specification confirm the invention is limited to synchronous memory devices. The only exemplary system or device described in the specification is in Figure 9 and the accompanying text, and “FIG. 9 illustrates a *memory* device

that uses the regenerative clock repeaters as described in FIG. 5.” ’232 patent at 3:28-29 (emphasis added); *see also id.* at 5:64-6:7, Fig. 9.

In short, the entire preamble of the claim 14 of the ’232 patent is limiting in view of both the claim language and the patent specification.

B. “detecting a rise edge from a low logical level and a fall edge from a high logical level of said clock signal” (claim 14)

Defendants’ Reply confirms that there is no lexicography, disclaimer, or other cognizable basis to limit the plain and ordinary term “rise edge from a low logical level” as “the clock signal passing above a low threshold voltage level set for the low logical level of the clock,” as well as their parallel proposal for “fall edge.” Defendants *admit* that the word “edge” has a “plain English meaning... as connoting a border or boundary, even in this context.” Reply at 14. There is no reason why a POSITA would fail to understand “rise edge” in its plain and ordinary sense; there is no reason why a POSITA would require further clarification; and there is no reason why the substantive scope of Claim 14 should be limited to require “thresholds” that are, at most, incidental features of the preferred embodiments.

Defendants make no attempt to distinguish *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 418 (1908) or *Linear Tech. Corp. v. Int’l Trade Comm’n*, 566 F.3d 1049, 1058 (Fed. Cir. 2009), confirming that their attempt to limit Claim 14 to the preferred embodiment is without merit and contradicted by long-standing authority. And Defendants *expressly abandon* the crux of their initial argument, admitting that they “are not proposing this construction because it would preserve the validity of the patent.” Reply at 15. This confirms that the extensive comparisons between the prior art and the patent’s “key inventive concept” in Defendants’ opening brief provide no support for their limiting construction. *Compare* Reply at 15 with Br. at 26-30. It would perhaps be a different matter if Defendants’ claimed “distinctions” between the prior art

and their “low threshold value” theory were reflected in lexicography or disclaimer within the ’232 Patent or its prosecution history, but they are not.

Instead, Defendants put forward a brand new theory: that “a lay juror will have difficulty understanding where the ‘rise edge’ might be that requires detecting.” Reply at 14. But Defendants concede that “edge” has a “plain English” meaning and provide no argument that “rise edge” means anything other than “rise edge” or “rising edge.” For example, there is no suggestion that the words themselves are in any way confusing or ambiguous. Instead, Defendants argue that a juror would fail to identify what specific *portion* of the rise edge corresponds to the claimed “rise edge.” But that argument assumes its own conclusion; there is no evidence, explanation, or argument why “rise edge” must be construed to refer to a particular portion of the rise edge, let alone to Defendants’ litigation-focused construction, *i.e.*, the point at which the rise edge crosses a “low threshold.”

And Defendants’ new contention that there is some “boundary” corresponding to “the part of the signal... where it *first begins to rise*,” and that “rise edge” corresponds to that “boundary,” is again unaccompanied by evidentiary support, explanation, or argument. Reply at 14. To the contrary, “rising edge” refers to “the transition from a low to a high logic level,” not a transition from a low level to a low threshold level. IEEE 100, The Authoritative Dictionary of IEEE Standards Terms, 7th ed., at 987 (Ex. 8); *id.* at 417 (“falling edge (1) A transition from a high to a low logic level.”). Because there is no lexicography, disclaimer, or any other cognizable basis to narrow the meaning of “rise edge” or the rest of the phrase, Defendants’ narrowing proposal should be rejected.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the counsel of record who are deemed to have consented to electronic service are being served on February 10, 2022 with a copy of this document via the Court's ECF system.

/s/ Christian W. Conkle
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